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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,802	07/12/2001	Ohad Zimron	15154 - XX	7466

7590 02/27/2003

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EXAMINER	
WAKS, JOSEPH	
ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 02/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/902,802	ZIMRON ET AL.	
	Examiner	Art Unit	
	Joseph Waks	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-6 and 8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-6 and 8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In line 1, "comprises" is a legal phraseology, line 13, "the present invention" is a phrase which can be implied.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 1, 2, 4-6** and **8** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bronicki (US 4,428,190)** in view of **The Dow Chemical Company, 1983 article "Achieving Low Pressure Cogeneration with DOWTHERM Heat Transfer Fluids"**.

Bronicki discloses in Figure 1 a heat source heating an intermediate fluid, a vaporized intermediate fluid from an intermediate fluid heater vaporizer 13, an intermediate fluid vapor turbine 18 expending the vaporized intermediate fluid and producing power, an organic working

fluid vaporized in an organic fluid vaporizer 27, a vaporized organic working fluid expended in an organic vapor turbine 28 to produce power, an intermediate fluid condensate supplied back to the intermediate fluid heater vaporizer and an organic fluid condensate supplied back to the organic fluid vaporizer. However, **Bronicki** fails to disclose the intermediate fluid being a synthetic, alkylated, aromatic heat transfer fluid.

The Dow Chemical Company discloses the synthetic, alkylated, aromatic heat transfer fluid for use in low pressure generating units for the purpose of providing a low freeze point fluid for the outdoor operation that is also non-corrosive to metals used in heat exchangers.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the method and the apparatus as taught by **Bronicki** and to provide the intermediate fluid being a synthetic, alkylated, aromatic heat transfer fluid as taught by **The Dow Chemical Company** for the purpose of providing a low freeze point fluid for the outdoor operation that is also non-corrosive to metals used in heat exchangers.

Response to Arguments

4. Applicant's arguments filed December 16, 2002 have been fully considered but they are not persuasive.

Re. Rejection of claims 3, 4, 7 and 8 under 35 U.S.C. 103 (a)

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In this particular case Bronicki teaches the method and apparatus for heating an intermediate fluid to produce vaporized fluid in the vaporizer 18, vaporizing an organic working fluid with heat from the intermediate vaporized fluid in the organic fluid vaporizer 27 and generating power with the organic vapor in the expander 28.

The article teaches a replacement of the water (like in Bronicki disclosure) or other fluids in low pressure generating units with the synthetic, alkylated, aromatic heat transfer fluid for the purpose of providing a low freeze point fluid for the outdoor operation that is also non-corrosive to metals used in heat exchangers. In combination the references teach the invention as claimed. Applicant's arguments regarding Bronicki's system supplying the heat to the organic fluid vaporizer via the heat store are respectfully traversed.

Examiner directs applicant's attention to claim language. The applicant's claimed system and method does not require neither the heat to be supplied directly to the organic fluid evaporator, nor does it require the intermediate vapors to be supplied to the organic evaporator, nor producing the organic vapors and the intermediate condensate in the organic evaporator. Therefore, the rejection of claims based on combination of Bronicki and Dow references is appropriate.

Applicant's arguments regarding rejection of claims 1-8 under 35 U.S.C. 102(b) in view of Yogev were considered and the rejection was withdrawn. However, examiner directs applicant's attention to the fact that the selection of the synthetic, alkylated, aromatic heat transfer fluid is a design choice since the fluid disclosed by Yogev has similar physical characteristics and it appears that the invention would perform equally well with the compounds cited in the reference. Moreover, it has been held to be within the general skill of a worker in the

art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

5. Applicant's arguments with respect to claims 1, 2, 5 and 6 under 35 U.S.C. 102 (b) in view of Bronicki (US 4,428,190) have been considered but are moot in view of the new ground(s) of rejection.

Prior Art

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Waks whose telephone number is (703) 308-1676. The examiner can normally be reached on Monday through Thursday 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

JOSEPH WAKS
PRIMARY PATENT EXAMINER
TC-2800

JW
February 20, 2003